

### Abstract

A fuel cell system comprises a fuel cell, a hydrogen discharge valve for discharging hydrogen from the fuel cell under a predetermined condition, a hydrogen concentration reduction device for reducing the concentration of hydrogen discharged from the hydrogen discharge valve, a hydrogen sensor for detecting an instantaneous hydrogen concentration of a gas processed by the hydrogen concentration reduction device and an average hydrogen concentration calculating unit for calculating an average hydrogen concentration per hour of a gas processed by the hydrogen concentration reduction device, wherein a hydrogen discharge from the fuel cell by the hydrogen discharge valve is prohibited in the event that an instantaneous hydrogen concentration detected by the hydrogen sensor exceeds a first threshold, or in the event that an average hydrogen concentration calculated by the average hydrogen concentration calculating unit exceeds a second threshold which is lower than the first threshold.